From: William Love <sombra@frontiernet.net>
To: Paul Baker <paulbaker@utah.gov>
Date: 4/5/2010 9:55 AM
Subject: Quantity by Weight of Chemicals in Waste M040090

CC: ": Canyonlands Watershed Council" <cwc@farcountry.org>
Paul- I have not been able to find the place I picked up the .29%
by weight for the chemical left in the waste. I am still searching.
The attached email from Scott Hacking DEQ says "most of it (chemical)
will be recovered" and "the reagent to be used for bitumen
extraction is generally non-toxic and volatile, and most of it will
be recovered and recycled in the extraction process". I am appalled
by the lack of specific knowledge and the use of broad general
statements by all or most of the state agencies.
Bill Love

>>

>X-MSK: CML=0.501000
>X-Virus-Scanned: amavisd-new at z-mta05.roch.ny.frontiernet.net
>Authentication-Results: mx06.roch.ny.frontiernet.net; dkim=neutral
>(message not signed) header.i=none
>X-IronPort-Anti-Spam-Filtered: true
>X-IronPort-Anti-Spam-Result:
>AhQCAG8gr0s/hs8TlGdsb2JhbACBRoFTmCQBAQEBCQkKCQ8krQSCawmMa4JugSlqBIMe
>X-IronPort-AV: E=Sophos;i="4.51,323,1267401600";
> d="scan'208,217";a="60978267"
>X-IronPort-Anti-Spam-Filtered: true
>X-IronPort-Anti-Spam-Result:
>Ap8FAH8fr0tKJnV8/2dsb2JhbACBRpkNVbBUCYxtgm6CEwSDHg
>X-IronPort-AV: E=Sophos;i="4.51,323,1267401600";
> d="scan'208,217";a="13392372"
>X-Previous-IP: 74.38.117.124
>X-Mailer: QUALCOMM Windows Eudora Version 7.1.0.9
>Date: Sun, 28 Mar 2010 10:24:26 -0600
>To: cwc@farcountry.org
>From: William Love <sombra@frontiernet.net>
>Subject: CWC: DWQ comments on Tar Sands
>X-Virus-Scanned: ClamAV 0.94.2/10642/Sun Mar 28 12:22:51 2010 on
>relay04.roch.ny.frontiernet.net
>X-Virus-Status: Clean
>List-Id: <listid.cwc.84731205.maila22.webcontrolcenter.com>
>X-Mailing-List: cwc@maila22.webcontrolcenter.com
>Reply-to: cwc@farcountry.org
>Sender: William Love <sombra@frontiernet.net>
>X-Originating-IP: 216.119.106.23
>
>
>>X-MSK: CML=0.001000
>>X-Virus-Scanned: amavisd-new at z-mta02.roch.ny.frontiernet.net
>>Authentication-Results: mx07.roch.ny.frontiernet.net; dkim=neutral
>>(message not signed) header.i=none
>>X-IronPort-Anti-Spam-Filtered: true
>>X-IronPort-Anti-Spam-Result:
>>AhcBAONjrEuosfyXmWdsb2JhbACBRZlmFQEBAQEBCAsKBxMisjMJjXKCa4ITBIMe
>>X-IronPort-AV: E=Sophos;i="4.51,314,1267401600";

>> d="scan'208,217";a="63243850"
>>X-Mailer: Novell GroupWise Internet Agent 8.0.1
>>Date: Fri, 26 Mar 2010 08:36:59 -0600
>>From: "Robert Herbert" <rherbert@utah.gov>
>>To: "William E Love" <sombra@frontiernet.net>
>>Cc: "Michael George jr" <mmgeorge@utah.gov>,
>> "Scott Hacking" <scotth@utah.gov>
>>Subject: Earth Energy Resources PR Springs Project
>>X-GWPos: 12877755-12877882
>>
>>Mr. Love,
>>
>>This email is a response to the phone message you left me last
>>Thursday, March 17 2010. Scott Hacking, the DEQ District Engineer
>>for the Uinta Basin, forwarded me your photo links below, which
>>show a small tar sand ore borrow pit at the Earth Energy Resources
>>(EER) PR Spring pilot processing project. I viewed your photos and
>>discussed them with District Engineer Scott Hacking and Mike George
>>of the Division of Water Quality UPDES Storm Water Program. Scott
>>and Mike inspected the EER site in 2009 and the photos they took
>>during their inspection are similar to yours and show that the
>>borrow pit contains storm water that has turned green as a result
>>of algae growth caused by runoff of nutrients into the pit from
>>cattle manure. Scott and Mike both stated that the borrow pit is
>>very stable and completely contained on all sides.
>>
>>
>>The Division of Water Quality (DWQ) has reviewed information
>>submitted by JBR Environmental Consultants, Inc. on February 22,
>>2008 requesting ground water discharge permit-by-rule for the EER
>>PR Spring tar sands project. The operation consists of open-pit
>>mining of tar sands, extraction of bitumen, and disposal of
>>tailings and waste rock.<?xml:namespace prefix = o ns =
>>"urn:schemas-microsoft-com:office:office" />
>>
>>
>>
>>Below are several relevant factors for determining whether the
>>proposed operation will have a de minimis effect on ground water
>>quality or beneficial uses of ground water resources.
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>>1. Based on Material Safety Data Sheets and other information
>>reviewed by DWQ in January 2007, the reagent to be used for bitumen
>>extraction is generally non-toxic and volatile, and most of it will
>>be recovered and recycled in the extraction process.
>>
>>
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>>2. Bitumen extraction will be done using tanks and equipment
>>at the processing facility located at the mine site, and no
>>impoundments or process water ponds are planned. Most of the water
>>used in the process will be recovered and recycled.
>>
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>>3. Processed tailings will not be free-draining and will have
>>moisture content in the 10 to 20 percent range. The tailings will
>>not contain any added constituents that are not present naturally
>>in the rock, other than trace amounts of the reagent used for
>>bitumen extraction. Analysis of processed tailings using the
>>Synthetic Precipitation Leachate Procedure indicates that leachate
>>derived from the tailings by natural precipitation would have
>>non-detectable levels of volatile and semi-volatile organic
>>compounds. Unprocessed tar sands and processed tailings were
>>analyzed using the Toxicity Characteristic Leaching Procedure
>>(TCLP) with an extraction process that uses a much lower pH than is
>>likely to occur at the mine site. Analytical results indicate that
>>TCLP metals would not be leached from the tailings at detectable
>>levels except for barium, which was detected at levels below the
>>Utah ground water quality standard of 2.0 milligrams per liter
>>(Table 1 of UAC 317-6). Based on these data, the tailings will be
>>disposed by backfilling into the mine pit.
>>
>>
>> * The uppermost geologic formations at the site are the
>> Parachute Creek and Douglas Creek Members of the Green River
>> Formation, which consist of fluvial-deltaic and lacustrine-deltaic
>> deposits of claystone, siltstone, fine-grained sandstone, and
>> limestone. The Parachute Creek Member outcrops over most of the
>> EER lease and is the 0 to 50-foot thick overburden above the tar
>> sand deposits of the Douglas Creek Member. Shallow ground water
>> at the site is not part of a regional aquifer but occurs in
>> localized laterally discontinuous perched sandstone lenses of the
>> Douglas Creek Member. Exploration drilling did not encounter
>> ground water within 150 feet of the land surface. Based on
>> records from the Division of Oil, Gas, and Mining, the closest
>> major aquifer is the Mesa Verde Formation, which occurs
>> approximately 2000 feet below ground surface in the area of the
>> proposed mine. The topography of the project area is
>> characterized by mesas incised by deep, narrow canyons, and
>> limited shallow ground water discharges as springs in the canyon
>> bottoms. There are no springs in the EER leased area and the
>> nearest spring is PR Spring located about a mile east of the project site.
>>
>> Considering the factors described above, DWQ determined that the
>> mining and bitumen pilot extraction operation would have a de
>> minimis potential effect on ground water quality and qualifies for
>> ground water discharge permit-by-rule status under UAC
>> R317-6-6.2.A(25). If any of these factors change because of
>> changes in the operation or from additional knowledge of site
>> conditions, this permit-by-rule determination may not apply. If
>> future project knowledge or experience indicates that ground water
>> quality is threatened by this operation, the Executive Secretary
>> can require EER to obtain a ground water discharge permit in
>> accordance with UAC R317-6-6.2.C.
>>
>>
>>
>>I hope I have addressed your concerns regarding the EER PR Spring
>>borrow pit photographs.

>>Rob Herbert, P.G., Manager
>>Ground Water Protection Section
>>Division of Water Quality
>>Utah Department of Environmental Quality
>>Voice: (801) 538-6038
>>Voice after April 22: (801) 536-4350
>><mailto:rherbert@utah.gov>rherbert@utah.gov
>>
>>
>>
>> >>> William Love
>> <<mailto:sombra@frontiernet.net>sombra@frontiernet.net > 3/18/2010 9:22 AM >>>
>>
>>Pictures of Tar Sand Operation. I will try to get location and dates.
>>
>>Bill Love
>>
>> >Now, imagine this type of disturbance as far as the eye can see in
>> >every direction which is what it looks like in Canada.
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>> >
>> >
>> >< http://www.farcountry.org/photos/TarSand/TarSandsUinta1.jpg >
>> http://www.farcountry.org/photos/TarSand/TarSandsUinta1.jpg
>> > http://www.farcountry.org/photos/TarSand/TarSandUinta2.jpg
>> >< http://www.farcountry.org/photos/TarSand/TarSandUinta3.jpg >
>> http://www.farcountry.org/photos/TarSand/TarSandUinta3.jpg
>> > http://www.farcountry.org/photos/TarSand/TarSandUinta4.jpg
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